REMARKS

Applicant respectfully requests reconsideration in view of the amendment and following remarks. Since the Examiner has reopened prosecution, and now does not believe that the features of claim 67 render claim 1 allowable, the applicant has deleted the features of claim 67 from claim 1 and added this feature as newly added claim 92. Claim 93 is identical to claim 1 that was in existence at the time of filing the applicant's appeal brief. In addition, upon reviewing the claims, the applicant noticed that the word "composition" was inadvertently omitted from the preamble of claims 68, 69, 71, 72 and 83-91. The applicant has corrected this. Support for new added claims 94 and 95 can be found in the examples and in the original claim 2.

The applicant authorizes the PTO to charge the undersigned's Deposit Account No. 03-2775, under Order No. 00306-00142-USU from which the undersigned is authorized to draw for the extra four claims added to the application. The application contains three independent claims (claims 1, 93 and 94).

Claims 1, 3-18, 20-28, 30-39, 41-48, 50-56, 68, 69, 71, 72, 86-91 were rejected under 35 U.S.C. 103(a) as being obvious over AF 300 from Nufarm MSDS (AF 300). The applicant respectfully traverses this rejection.

The applicant has enclosed a declaration from Johnnie Roberts executed 7/22/05 which establishes that AF 300 herbicide does not fully dissolve said chlorinated carboxylic acid herbicide in the surfactant as is required by the applicant's claimed invention (see independent claims 1, 93 and 94). See exhibit 1, Roberts declaration, executed 7/22/05 in particular, paragraphs 5 and 6. The applicant is clearly describing a composition in which the surfactant fully solubolizes the acid herbicide. (see all examples). Again, as one reconstructs the formulation from the details provided in the AF-3000 MSDS, the 2,4-D is not fully solubolized

even with the kerosene. Full solubolization of the herbicide is a primary characteristic of the applicant's invention. The feature that the acid herbicide was "fully solubolized" is a critical difference between the applicant's claimed invention and what can be duplicated by AF-300 disclosures. Since AF-300 does not meet this feature, this rejection should be withdrawn.

Claim 1 is further distinguished because it uses transitional phrase "consisting essentially of'. However, according to the MSDS, Agricrop's AF 300 herbicide, Infosafe No. NU003 contains, *inter alia*, "solvent 400," otherwise known as kerosene. Applicant again respectfully requests reconsideration of the rejection based on U.S.C. § 103(a) for obviousness because claim 1 contains the transitional phrase, "consisting essentially of." This transitional phrase is interpreted in the case law as, "commonly used to signal a partially open claim in a patent. . . [b]y using the term 'consisting essentially of,' the drafter signals that the invention necessarily includes the listed ingredients and is open to unlisted ingredients *that do not materially affect the basic and novel properties of the invention* (emphasis added). (*PPG Industries v. Guardian Industries, Corp.*, 156 F.3d 1351, 1354 (Fed. Cir. 1998) (rehearing *en banc* declined Nov. 25, 1998)).

According to many reports in the industry, kerosene <u>would</u> materially affect the basic and novel properties of the present invention.

(1) In the "2004 Louisiana Suggested Weed Control Guide," available at http://www.lsuagcenter.com/weedguide/pdf, visited December 20, 2004, kerosene has a "toxicity rating" between 2-3. A toxicity rating between 2-3 means that the compound "causes burns and blisters [to] moderately irritating."

(2) <u>**Additionally, kerosene in herbicides is dangerous to the eye, skin and respiratory systems of mammals.**</u> It can cause a potentially fatal chemical pneumonia and

inflammation in fish. "Even in small amounts of diesel and kerosene in water is highly toxic to fish."[1]

(3) Furthermore, kerosene is often described as an "inert ingredient" in herbicides. An "inert ingredient" is defined as an ingredient that "enhances the action of the active ingredient" (emphasis added).[2]

(4) Further evidence that kerosene causes problems is that Agricp Affray 300 Herbicide's formulation was changed . The applicant previously submitted a copy of the February 3, 2003 Material Safety Data Sheet ("MSDS"). According to the new MSDS, Agricrop's AF 300 herbicide, has replaced the kerosene (Solvent 400) with Solvesso 150. Most surfactants have been used safely for years including consumer products. Furthmore, many sufactants have been used safely in aquatic herbicide applications with no detriment to aquatic life. See Exhibit No. 5, Tomah brochure discussing the safety of Tomadol surfactants for aquatic species.

(5) The use of kerosene in this large amount (Solvent 400 is 235 grams per liter) significantly affects the benefits of the inventive formulation. Also previously submitted was a declaration from Johnnie Roberts which has the MSDS as an Appendix (see Exhibit 2 Roberts Declaration executed February 3, 2005). Contrary to what the Examiner has asserted, the declaration established that kerosene causes problems and would materially effect the claimed invention for the following 4 reasons:

a. Kerosene is flammable and therefore posses several problems such as with shipping and handling. However, the applicant's formulation can be non-flammable.

[1] http://www.powerlink.net/fen/tmwfall99_05.html visited December 20, 2004.
[2] http://chppm-www.apgea.army.mil/ento/mpmh/chap6.htm visited December 20, 2004.
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b. Kerosene has a very noticeable and objectionable odor. Because 2,4-D esters are frequently applied in conjunction with kerosene, this would be a liability as compared with the inventive formulations which exhibit virtually no odor.

c. Kerosene poses a potential inhalation hazard. (See AF-300 MSDS sheet under Acute – Inhaled hazards).

d. Kerosene will likely cause deterioration of spray application equipment.

See Exhibit 5, Tomah brochure discussing the safety of Tomadol surfactants for humans. The applicant again respectfully requests that the Declaration executed by Johnnie Roberts on February 3, 2005 must be afforded patentable weight (see Exhibit 2 for a copy of the Declaration previously submitted). See also the Declaration of Johnnie Roberts executed 8/29/05 (see Exhibit 3). This declaration established that the addition of 235 grams of kerosene to the applicant's example 1 had several problems. The solution took on the odor of kerosene (which would be a real concern with herbicide drift) (see Exhibit 3, paragraph no. 5 of the declaration). There also raises problems with the shipping of the composition containing kerosene (see Exhibit 3, paragraph no. 6 of Robert's declaration).

Furthermore, kerosene is most ostensibly used as a solvent in this formulation. It is even referred to as Solvent 400 on the MSDS. There was no reason prior to applicant's discovery, to believe that a solvent could be left out of the formulation. Assuming arguendo that it could possibly have been changed, even changed to one that would not have been flammable, there was no reason to suspect that it could be omitted completely.

Therefore, <u>in view of any of the evidence presented above</u>, kerosene clearly would materially, effect the basic and novel properties of the present invention, thus, cannot fall within the scope of claim 1 of the Applicant's invention and accordingly to the applicable case law. For the above reasons, this rejection should be withdrawn.

PREVIOUS REJECTION OVER BERGER

Claim 1 was rejected under 35 U.S.C. 103(a) as being obvious over Berger et al. U.S. Patent No. 6,121,200 ("Berger") in view of Caldwell et al., "Toxicity of Herbicides 2,4-D, DEF, propanil, and trifluralin," *Archives of Environmental Contam. and Toxicology*, Vol. 8, No. 4, pp. 383-396 (1979) ("Caldwell"). The applicant has added claim 93 which is identical to claim 1 at the time of the Appeal Brief.

The applicant has found a way to use the more active chlorinated carboxylic acid herbicides in the acid form **by fully dissolving the acid herbicide in a surfactant**. These formulations have shown superior herbicidal activity when compared to standard salt and ester forms (see the abstract).

As shown in the Johnnie Roberts declaration, one important feature of the applicant's claimed invention fully dissolves the acid herbicide in a surfactant. This is not taught by Berger.

The applicant has discovered a way to fully dissolve the acid form of this herbicide into a form that is usable by the farmer. Other than D-638 (which the applicant discloses in the application) which uses an aromatic solvent to dissolve the acid in combination with 2,4-D ester, nobody has commercially introduced a herbicide product which contains 2,4-D fully solubolized in the acid form.

The Examiner must consider the references as a whole, In re Yates, 211 USPQ 1149 (CCPA 1981). The Examiner cannot selectively pick and choose from the disclosed multitude of parameters **without any direction** as to the particular one selection of the reference **without proper motivation**. The mere fact that the prior art may be modified to reflect features of the claimed invention does not make modification, and hence claimed invention, obvious **unless the prior art suggested the desirability of such modification** is suggested by the prior art (In re

Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); In re Baird, 29 USPQ 2d 1550 (CAFC 1994) and In re Fritch, 23 USPQ 2nd. 1780 (Fed. Cir. 1992)). In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (in a determination under 35 U.S.C. § 103 it is impermissible to simply engage in a hindsight reconstruction of the claimed invention; the references themselves must provide some teaching whereby the applicant's combination would have been obvious); In re Dow Chemical Co., 837 F.2d 469,473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) (under 35 U.S.C. § 103, both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure). The applicant disagrees with the Examiner why one skilled in the art with the knowledge of the references would selectively modify the references in order to arrive at the applicant's claimed invention. The Examiner's argument is clearly based on hindsight reconstruction.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching, suggestion, or incentive supporting this combination, although it may have been obvious to try various combinations of teachings of the prior art references to achieve the applicant's claimed invention, such evidence does not establish prima facie case of obviousness (In re Geiger, 2 USPQ 2d. 1276 (Fed. Cir. 1987)). There would be no reason for one skilled in the art to combine Berger and Caldwall. For the above reasons, claim 93 is patentable.

The applicant has enclosed a declaration executed August 29, 2005 by Johnnie Roberts which establishes that the formulation according to Berger did not have said chlorinated carboxylic acid herbicide dissolve in the surfactant as is required by independent claims 1, 93 and 94 (See Exhibit 4).

DEPENDENT CLAIMS

Dependent claims 12-27, 33-36, 43-47, and 53-56 are further patentable because these claims require at least 50% of the solvent. AF-300 discloses the following composition:

300 grams per liter of 2,4-D acid,

50% of a synthetic ethoxylated alcohol,

235 grams per liter of Solvent 400.

The composition is disclosed to have a density of 1.044 grams per ml or 1044 grams per liter. Therefore the weight in grams per liter of the synthetic ethoxylated alcohol would necessarily be

1044 - 300 - 235 = 509 grams per liter

Thus, the percentage by weight of the synthetic ethoxylated alcohol is 100 * 509/1044 or 48.75%

Therefore these claims drawn to "wherein said surfactant is present in an amount of at least 50% by weight" should be clearly allowable. The other dependent claims that are drawn to "70 to about 80%" by weight of surfactant are even more clearly allowable over AF-300.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no additional fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 00306-00142-USU from which the undersigned is authorized to draw.

Respectfully submitted,

By _____

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ENCLOSURE:

EXHIBIT 1 ROBERTS DECLARATION EXECUTED JULY 2005
EXHIBIT 2 ROBERTS DECLARATION EXECUTED FEBRAURY 2005
EXHIBIT 3 ROBERTS DECLARATION EXECUTED SEPTEMBER 2005
EXHIBIT 4 ROBERTS DECLARATION EXECUTED SEPTEMBER 2005
EXHIBIT 5 TOMADOL